

CSC 174 Fall 2023

Assignment 1

Draw an EER diagram according to the following requirements. You can draw the diagram using tools that you prefer, such as Microsoft Visio. Do NOT use min-max notation. Please submit a PDF file. Hand-drawn diagram will NOT be accepted. Please remember that in the course, no hand-written submission will be accepted. List your assumptions, if there is any.

The university registrar's office maintains data about each course, including course number (unique), course name, instructor. Instructor has an instructor ID (unique), a name, and a title (e.g. "Lecture", "Assistant Professor"). Each course is either an online course or a traditional in person course with face to face instruction, or both. If it is a web-based course then its URL is maintained. If it is a in-person course, then the class room in which it is taking place is noted and the class time is noted. The registrar's office maintains each classroom's room number, building, and capacity in which the class takes place. For a course a Teaching Assistant (TA) may be appointed, if a TA is appointed then he should have a salary. The office maintains each student's SSN (unique), name, address and email.

Constraints:

- A Teaching Assistant (TA) is a student.
- Each student must enroll in at least one course.
- A course can be taken by many students (at least one) and a student can take many courses. For each student-course pair, a grade is recorded. A course must have at least one student enrolled.
- For each course, the application keeps track of number of students enrolled.
- A course will be graded by one TA if the course has a TA.
- A TA can grade many courses. A TA must grade at least one course.
- A course is taught by just one instructor and one instructor can teach many courses, at least one.
- An in-person course must take place in one and only one class room and a classroom can have many in-person courses. A classroom may not hold any course (for example, a classroom was not used by any course because it is too far away from the main campus).